

CLAIMS:

1. A low-pressure gas discharge lamp equipped with a gas-discharge vessel containing an inert gas filling as the buffer gas and an indium, thallium, and/or copper halide, and with electrodes and with means for generating and maintaining a low-pressure gas discharge, characterized in that a compound selected from the group of ABO_3 or A_nBO_{2+n} ,
5 $A_nC_2O_{5+n}$, or $A_nD_2O_{3+n}$ is used as the electron emitter substance, wherein:
A = an alkaline earth element or a mixture of several different alkaline earth elements
B = cerium, titanium, zirconium, hafnium, or a mixture of these elements
C = vanadium, niobium, tantalum, or a mixture of these elements
10 D = scandium, yttrium, lanthanum, a rare earth element, or a mixture of these elements.
2. A low-pressure gas discharge lamp as claimed in claim 1, characterized in that a reduced emitter substance selected from the group of $ABO_{3-\epsilon}$, $A_nBO_{2+n-\epsilon}$, $A_nC_2O_{5+n-\epsilon}$ or
15 $A_nD_2O_{3+n-\epsilon}$ is used as the electron emitter substance, wherein ϵ represents a small number between 0 and 1.
3. A low-pressure gas discharge lamp as claimed in claims 1 and 2, characterized in that it contains an inert gas from the group of helium, neon, argon, krypton, and/or xenon
20 as the buffer gas.
4. A low-pressure gas discharge lamp as claimed in any one of claims 1 to 3, characterized in that the gas discharge vessel is coated with a fluorescent coating on its interior and/or exterior.
- 25 5. A use of the electron emitter substance as claimed in claim 1 as the coupling structure for a capacitive operation of a molecular indium halide, thallium halide, or copper halide discharge.

6. A use of the electron emitter substance as claimed in claim 1 as the emitter on a tungsten electrode.

7. A use of the electron emitter substance as claimed in claim 1 as the electrode
5 material that has been rendered conductive by means of additives.